

II. The Restriction Requirement

Applicants acknowledge the finality of the restriction requirement but maintain their traversal. To facilitate prosecution, however, Applicants have removed the non-elected claims from the application.

Applicants also acknowledge the finality of the election requirement to a single nucleotide sequence, but maintain their traversal. Applicants respectfully disagree that the polynucleotide sequences of the instant application would be considered of the complexity that merits restriction to a single sequence in contradiction to the expressed USPTO policy of examining ten sequences, as set forth in the Manual of Patent Examining Procedure. (*See* MPEP, 8th ed., August 2001, Section 803.04, page 800-10). However, in order to facilitate prosecution Applicants have removed non-elected sequences from the claims.

III. Rejection of Claim 1 under 35 U.S.C. §112, 2nd Paragraph: Indefiniteness

Claim 1 was rejected under 35 U.S.C. § 112, second paragraph, for allegedly failing to particularly point out and distinctly claim the subject matter which Applicants regard as their invention. The basis for the Examiner's rejection is that the term "substantially", as used in claim 1, "is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably appraised of the scope of the invention." Office Action at page 3.

Applicants respectfully disagree. Applicants respectfully point out that the claims are to be read in light of the specification. *See in re Vogel*, 422 F.2d 438, 441, 164 U.S.P.Q. 619, 622 (C.C.P.A. 1970). The test for determining whether terms in a given claim are indefinite is whether one skilled in the art would understand what is claimed. *Amgen, Inc. v. Chugai Pharmaceutical Co., Ltd.*, 927 F.2d 1200, 18 U.S.P.Q.2d 1016 (Fed. Cir. 1991). A person of ordinary skill in the art would understand the metes and bounds of the claims read in light of the disclosure of the specification.

Claim 1 requires “a substantially purified nucleic acid molecule”. The term “substantially purified” is explicitly defined in the specification at page 17, lines 6-12. In light of Applicants’ disclosure, one of ordinary skill in the art would clearly understand the metes and bounds of the claim. Thus, the rejection of claim 1 under 35 U.S.C. § 112, second paragraph, is improper. Reconsideration and withdraw of this rejection is respectfully requested.

IV. The Rejection of Claim 1 under 35 U.S.C. § 102

The Examiner has rejected claim 1 under 35 U.S.C. § 102(e) as anticipated by Klann, U.S. Patent No. 6,068,974, filed on April 29, 1998. The Examiner’s position is based on the allegation that U.S. Patent No. 6,068,974 teaches “a 674 base pair purified nucleic acid molecule containing a 7 base pair fragment at 425 of SEQ. ID. NO: 1.” Office Action at page 4. Applicants respectfully disagree.

“It is axiomatic that for prior art to anticipate under § 102 it has to meet every element of the claimed invention.” *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 231 U.S.P.Q. 81 (Fed. Cir. 1986). Further, “an anticipation rejection requires a showing that each limitation of a claim must be found in a single reference, practice, or device.” *In re Donohue*, 766 F.2d 531, 226 U.S.P.Q. 619 (Fed. Cir. 1985).

In the present application, pending claim 1 is directed to a nucleic acid molecule which encodes that encodes a maize protein or fragment thereof comprising a nucleic acid sequence of SEQ ID NO: 1. The reference cited by the Examiner discloses a 674 base-pair region of the pseudorabies virus gII gene. *See* U.S. Patent No. 6,068,974 at col. 2, lines 61-66. The Examiner has applied an untenable interpretation of claim 1 to cover small fragments of the specifically claimed nucleic acid molecule, *i.e.*, molecules as short as two codons, and thus concludes that the claim is anticipated by the cited reference. Office Action at page 4. A grammatically consistent interpretation of the claim at issue would relate the phrase “or fragment thereof” in the preamble back to the phrase “maize protein” directly preceding it. Further, because the phrase “or fragment thereof” appears before the transition phrase “comprising”, it is clear that it does not refer to a fragment of SEQ ID NO: 1.

As such, pending claim 1 is directed to a nucleic acid molecule which encodes a maize protein or fragment thereof, *i.e.*, a fragment of a maize protein, comprising the nucleic acid sequence of SEQ ID NO: 1. Whatever U.S. Patent No. 6,068,974 teaches, it does not disclose SEQ ID NO: 1. Absent a teaching of each and every element of the claim, including the nucleotide sequence of SEQ ID NO: 1, the reference cited by the Examiner does not anticipate pending claim 1.

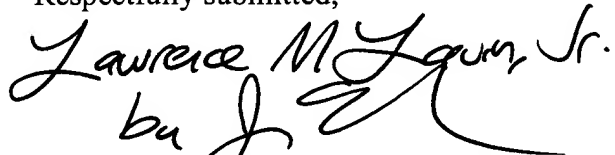
In view of the above, Applicants contend the rejection under 35 U.S.C. § 102(e) is improper. Reconsideration and withdrawal of this rejection is respectfully requested.

Conclusion

In view of the above, the presently pending claims are believed to be in condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejections and pass the application to issue. The Examiner is encouraged to contact the undersigned with respect to any unresolved issues remaining in this application.

In the event that extensions of time beyond those petitioned for herewith are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned. Applicants do not believe that any fees in addition to those provided for in the accompanying documents, are due at this time. However, if any fees under 37 C.F.R. §§ 1.16 or 1.17 are required in the present application, including any fees for extensions of time, then the Commissioner is hereby authorized to charge such fees to Deposit Account No. 50-2387, referencing docket number 16517.001/15771B.

Respectfully submitted,



Lawrence M. Lavin, Jr. (Reg. No. 30,768)
by June E. Cohan (Reg. No. 43,741)

Date: November 14, 2002

MONSANTO COMPANY
800 N. Lindbergh Blvd.
Mailzone N2NB
St. Louis, MO 63167
(314) 694-3602 telephone
(314) 694-1671 facsimile

Marked-Up Version of Amended Claims

1. (Amended) A substantially purified nucleic acid molecule that encodes a maize protein or fragment thereof comprising a nucleic acid sequence **[selected from the group consisting]** of SEQ ID NO: 1 **[through SEQ ID NO: 14882]**.